

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	468	(composite near3 \$3oxide) with ((surface adj1 area) or "m. sup"?2\$4 or "m2/g")	US-PGPUB; USPAT	ADJ	ON	2006/03/23 12:40
L2	1	l1 and roundness with "0.950"	US-PGPUB; USPAT	ADJ	ON	2006/03/23 12:41
L3	2	(toner and roundness with "0.950").ab.	US-PGPUB; USPAT	ADJ	ON	2006/03/23 12:43
L4	9	(toner and roundness with "0.950").clm.	US-PGPUB; USPAT	ADJ	ON	2006/03/23 12:43
L5	7	l4 not l3	US-PGPUB; USPAT	ADJ	ON	2006/03/23 12:43
S5	1	("20050260515").PN.	US-PGPUB; USPAT	OR	OFF	2006/03/23 07:02
S6	1	us-20050260515-\$.did.	EPO; JPO; DERWENT	ADJ	ON	2006/03/23 07:07
S7	219	(composite near3 \$3oxide) with ((surface adj1 area) or "m. sup"?2\$4)	EPO; JPO; DERWENT	ADJ	ON	2006/03/23 07:12
S8	229	(composite near3 \$3oxide) with ((surface adj1 area) or "m. sup"?2\$4 or "m2/g")	EPO; JPO; DERWENT	ADJ	ON	2006/03/23 12:39
S9	4	S8 and toner	EPO; JPO; DERWENT	ADJ	ON	2006/03/23 07:22
S10	1	("6660442").PN.	US-PGPUB; USPAT	OR	OFF	2006/03/23 07:25
S11	14	etb adj1 "100"	US-PGPUB; USPAT	ADJ	ON	2006/03/23 07:25
S12	11	S11 and toner	US-PGPUB; USPAT	ADJ	ON	2006/03/23 07:25
S13	12	("20010031415"   "20020076635"   "20020177059"   "20030017405"   "20030054276"   "20030059699"   "20030073018"   "20030099890"   "5776646"   "5827632"   "6248492"   "6338929").PN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/03/23 08:01
S14	2	"6248492".uref.	US-PGPUB; USPAT; USOCR	ADJ	ON	2006/03/23 08:01

# Periodic Table of the Elements

Point at or click an element from the Periodic Table for more information:

GROUPS 

Group***	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Period	1A	2A	3B	4B	5B	6B	7B	8	8	8	1B	2B	3A	4A	5A	6A	7A	8A
1	<u>H</u> 1.008																	<u>He</u> 4.003
2	<u>Li</u> 6.941	<u>Be</u> 9.012											<u>B</u> 10.81	<u>C</u> 12.01	<u>N</u> 14.01	<u>O</u> 16.00	<u>F</u> 19.00	<u>Ne</u> 20.18
3	<u>Na</u> 22.99	<u>Mg</u> 24.31											<u>Al</u> 26.98	<u>Si</u> 28.09	<u>P</u> 30.97	<u>S</u> 32.07	<u>Cl</u> 35.45	<u>Ar</u> 39.95
4	<u>K</u> 39.10	<u>Ca</u> 40.08	<u>Sc</u> 44.96	<u>Ti</u> 47.88	<u>V</u> 50.94	<u>Cr</u> 52.00	<u>Mn</u> 54.94	<u>Fe</u> 55.85	<u>Co</u> 58.93	<u>Ni</u> 58.69	<u>Cu</u> 63.55	<u>Zn</u> 65.39	<u>Ga</u> 69.72	<u>Ge</u> 72.59	<u>As</u> 74.92	<u>Se</u> 78.96	<u>Br</u> 79.90	<u>Kr</u> 83.80
5	<u>Rb</u> 85.47	<u>Sr</u> 87.62	<u>Y</u> 88.91	<u>Zr</u> 91.22	<u>Nb</u> 92.91	<u>Mo</u> 95.94	<u>Tc</u> (98)	<u>Ru</u> 101.1	<u>Rh</u> 102.9	<u>Pd</u> 106.4	<u>Ag</u> 107.9	<u>Cd</u> 112.4	<u>In</u> 114.8	<u>Sn</u> 118.7	<u>Sb</u> 121.8	<u>Te</u> 127.6	<u>I</u> 126.9	<u>Xe</u> 131.3
6	<u>Cs</u> 132.9	<u>Ba</u> 137.3	<u>La*</u> 138.9	<u>Hf</u> 178.5	<u>Ta</u> 180.9	<u>W</u> 183.9	<u>Re</u> 186.2	<u>Os</u> 190.2	<u>Ir</u> 192.2	<u>Pt</u> 195.1	<u>Au</u> 197.0	<u>Hg</u> 200.6	<u>Tl</u> 204.4	<u>Pb</u> 207.2	<u>Bi</u> 209.0	<u>Po</u> (210)	<u>At</u> (210)	<u>Rn</u> (222)
7	<u>Fr</u> (223)	<u>Ra</u> (226)	<u>Ac**</u> (227)	<u>Rf</u> (257)	<u>Db</u> (260)	<u>Sg</u> (263)	<u>Bh</u> (262)	<u>Hs</u> (265)	<u>Mt</u> (266)	<u>Uun</u> 0	<u>Uuu</u> 0	<u>Uub</u> 0	<u>Uut</u> 0	<u>Uuq</u> 0	<u>Uup</u> 0	<u>Uuh</u> 0	<u>Uus</u> 0	<u>Uuo</u> 0

Lanthanide Series*	<u>Ce</u> 140.1	<u>Pr</u> 140.9	<u>Nd</u> 144.2	<u>Pm</u> (147)	<u>Sm</u> 150.4	<u>Eu</u> 152.0	<u>Gd</u> 157.3	<u>Tb</u> 158.9	<u>Dy</u> 162.5	<u>Ho</u> 164.9	<u>Er</u> 167.3	<u>Tm</u> 168.9	<u>Yb</u> 173.0	<u>Lu</u> 175.0
Actinide Series**	<u>Th</u> 232.0	<u>Pa</u> (231)	<u>U</u> (238)	<u>Np</u> (237)	<u>Pu</u> (242)	<u>Am</u> (243)	<u>Cm</u> (247)	<u>Bk</u> (247)	<u>Cf</u> (249)	<u>Es</u> (254)	<u>Fm</u> (253)	<u>Md</u> (256)	<u>No</u> (254)	<u>Lr</u> (257)

\*\*\*Groups are by 3 notation conventions.

# STN Columbus

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
 NEWS 2 "Ask CAS" for self-help around the clock  
 NEWS 3 DEC 21 IPC search and display fields enhanced in CA/CAPLUS with the  
 IPC reform  
 NEWS 4 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/  
 USPAT2  
 NEWS 5 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB  
 NEWS 6 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to  
 INPADOC  
 NEWS 7 JAN 17 Pre-1988 INPI data added to MARPAT  
 NEWS 8 JAN 17 IPC 8 in the WPI family of databases including WPIFV  
 NEWS 9 JAN 30 Saved answer limit increased  
 NEWS 10 JAN 31 Monthly current-awareness alert (SDI) frequency  
 added to TULSA  
 NEWS 11 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist  
 visualization results  
 NEWS 12 FEB 22 Status of current WO (PCT) information on STN  
 NEWS 13 FEB 22 The IPC thesaurus added to additional patent databases on STN  
 NEWS 14 FEB 22 Updates in EPFULL; IPC 8 enhancements added  
 NEWS 15 FEB 27 New STN AnaVist pricing effective March 1, 2006  
 NEWS 16 FEB 28 MEDLINE/LMEDLINE reload improves functionality  
 NEWS 17 FEB 28 TOXCENTER reloaded with enhancements  
 NEWS 18 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral  
 property data  
 NEWS 19 MAR 01 INSPEC reloaded and enhanced  
 NEWS 20 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes  
 NEWS 21 MAR 08 X.25 communication option no longer available after June 2006  
 NEWS 22 MAR 22 EMBASE is now updated on a daily basis

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,  
 CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
 AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.  
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<http://download.cas.org/express/v8.0-Discover/>

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:14:13 ON 23 MAR 2006

=> fil ca; e us-20050260515/pn

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CA' ENTERED AT 08:14:34 ON 23 MAR 2006

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FILE COVERS 1907 - 16 Mar 2006 VOL 144 ISS 13  
FILE LAST UPDATED: 16 Mar 2006 (20060316/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

E1	1	US2005260513/PN
E2	1	US2005260514/PN
E3	1 -->	US2005260515/PN
E4	1	US2005260516/PN
E5	1	US2005260517/PN
E6	1	US2005260518/PN
E7	1	US2005260519/PN
E8	1	US2005260520/PN
E9	1	US2005260521/PN
E10	1	US2005260522/PN
E11	1	US2005260523/PN
E12	1	US2005260524/PN

=> s e3

L1 1 US2005260515/PN

=> sel rn

E1 THROUGH E11 ASSIGNED

=> fil reg; s e1-e11

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.38	2.59

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STRUCTURE FILE UPDATES: 21 MAR 2006 HIGHEST RN 877591-95-2  
DICTIONARY FILE UPDATES: 21 MAR 2006 HIGHEST RN 877591-95-2

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## STN Columbus

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

```
*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005. A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

```
1 108501-26-4/BI
  (108501-26-4/RN)
1 12673-39-1/BI
  (12673-39-1/RN)
1 147-14-8/BI
  (147-14-8/RN)
1 159995-97-8/BI
  (159995-97-8/RN)
1 163332-39-6/BI
  (163332-39-6/RN)
1 169938-64-1/BI
  (169938-64-1/RN)
1 174179-90-9/BI
  (174179-90-9/RN)
1 174633-44-4/BI
  (174633-44-4/RN)
1 39467-15-7/BI
  (39467-15-7/RN)
1 52337-09-4/BI
  (52337-09-4/RN)
1 58500-40-6/BI
  (58500-40-6/RN)
L2 11 (108501-26-4/BI OR 12673-39-1/BI OR 147-14-8/BI OR 159995-97-8/B
    I OR 163332-39-6/BI OR 169938-64-1/BI OR 174179-90-9/BI OR 17463
    3-44-4/BI OR 39467-15-7/BI OR 52337-09-4/BI OR 58500-40-6/BI)
```

=> d scan

```
L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Silicon titanium oxide (9CI)
MF O . Si . Ti
CI COM, TIS
```

Component	Ratio
O	x
Ti	x

Si | x

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Silicic acid, iron salt (9CI)  
 MF Unspecified  
 CI MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Silicon zirconium oxide (9CI)  
 MF O . Si . Zr  
 CI TIS

Component	Ratio
O	x
Zr	x
Si	x

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Germanium silicon oxide (9CI)  
 MF Ge . O . Si  
 CI TIS

Component	Ratio
O	x
Ge	x
Si	x

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Aluminum silicon oxide (9CI)  
 MF Al . O . Si  
 CI COM, TIS

Component	Ratio
O	x
Si	x
Al	x

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Silicon tin oxide (9CI)  
 MF O . Si . Sn  
 CI TIS

Component	Ratio
-----------	-------

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Component	Ratio
O	x
Sn	x
Si	x

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) .

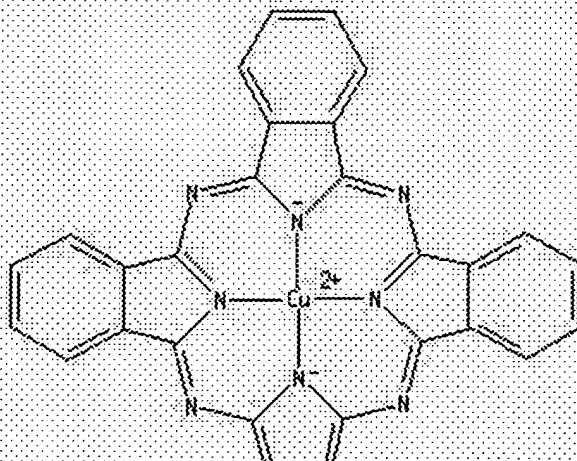
L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Silicon tungsten oxide (9CI)  
 MF O . Si . W  
 CI TIS

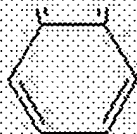
Component	Ratio
O	x
W	x
Si	x

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) .

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka  
 ppa.N32]-, (SP-4-1)- (9CI)  
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT  
 MF C32 H16 Cu N8  
 CI CCS, COM

PAGE 1-A





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1)end

=> d his

(FILE 'HOME' ENTERED AT 08:14:13 ON 23 MAR 2006)

FILE 'CA' ENTERED AT 08:14:34 ON 23 MAR 2006

E US-20050260515/PN

L1            1 S E3  
              SEL RN

FILE 'REGISTRY' ENTERED AT 08:14:50 ON 23 MAR 2006

L2            11 S E1-E11

=> s l2 and oxide

642465 OXIDE

L3            9 L2 AND OXIDE

=> fil ca; s l3 and toner

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

5.64

8.23

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3013 L3  
31789 TONER



# STN Columbus

L4 36 L3 AND TONER

=> s l4 and area

540507 AREA

L5 3 L4 AND AREA

=> d bib ab 1-3

L5 ANSWER 1 OF 3 CA COPYRIGHT 2006 ACS on STN

## Full Text

AN 142:325890 CA

TI Electrophotographic toners with excellent charging stability and full-color image formation therewith

IN Kato, Hiroaki; Anno, Masahiro; Tsutsui, Chikara; Arai, Takeshi

PA Konica Minolta Business Technologies, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005084295	A2	20050331	JP 2003-315235	20030908
	US 2005260515	A1	20051124	US 2004-777104	20040213
PRAI	JP 2003-315235	A	20030908		

AB The toners comprise wet-granulated toner particles with av. diam. 3-8  $\mu$ m and double-oxide microparticles contg. two or more of Group IVB-VIIB, VIII, IB-IIB, and/or IIIA-IVA metals and satisfying sp. surface area  $\leq 300$  m<sup>2</sup>/g, and preferably satisfy av. circularity  $\geq 0.950$ . The toners produce full-color prints with no fogging nor filming on photoreceptors or intermediate transfers.

L5 ANSWER 2 OF 3 CA COPYRIGHT 2006 ACS on STN

## Full Text

AN 141:114028 CA

TI Electrophotographic black toner containing iron oxide magnetic substance containing titanium

IN Mizoo, Yuichi; Hasegawa, Yusuke; Michigami, Tadashi; Shibayama, Akiko

PA Canon Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 39 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004198570	A2	20040715	JP 2002-364738	20021217
PRAI	JP 2002-364738		20021217		

AB The toner contg. a binder resin and a magnetic substance, is characterized by the followings: (1) its wt. av. particle diam. is 5-12  $\mu$ m; (2) a particle with sphericity (S)  $\geq 0.900$  defined by  $S = L0/L$  (L0 = peripheral length of a circle equiv. to projected area of a particle image; L = peripheral length of the particle image) is contained in content  $\geq 90$  no.% in toner with particles with  $\geq 3$   $\mu$ m; (3) av. sphericity is 0.94-0.97, and (4) its surface is covered with inorg. fine particles. The magnetic substance comprising an iron oxide particle with 0.1-0.3  $\mu$ m av. particle diam., is characterized by the followings: (a) the particle contains 0.3-1.5 wt.% Ti to its total amt.; (b) the particle satisfies  $A/B = 0.7-1$  [A (%) = FeO ratio to total Fe amt. in 10 wt.% from the particle surface; B (%) = that in residual 90 wt.%]; (c) particle surface is covered with Fe-Zn oxide layer and thereon with Fe-Si oxide layer; and (d) elec. resistivity is  $5 \times 10^1$  to  $5 \times 10^2$   $\Omega \cdot \text{cm}$ .

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103 ( $\Omega\cdot\text{cm}$ ). It prevents fog and scattering, showing improved durability and blackness.

L5 ANSWER 3 OF 3 CA COPYRIGHT 2006 ACS on STN

## Full Text

AN 138:278380 CA

TI Support for electrophotographic developer and electrophotographic developing apparatus

IN Murata, Kazuya; Takagi, Koji

PA Bridgestone Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003098818	A2	20030404	JP 2001-245468	20010813
PRAI	JP 2001-219179	A	20010719		

AB The support has a core and  $\geq 1$  elastic polymer layer contg. 0.5-100 phr of an adsorbent with sp. surface area  $\geq 0.4 \text{ m}^2/\text{g}$ , which is applied around the core. The support is for forming a thin film of a toner on the surface and for transporting of the toner to an electrostatog. latent image for development. Damage of toner on the support contacted with a blade, for regulation of the amt. of the toner, is avoided because the hardness of the support is lowered whereas contamination of other parts contacted with the support is also avoided in the claimed app.

=> d his

(FILE 'HOME' ENTERED AT 08:14:13 ON 23 MAR 2006)

FILE 'CA' ENTERED AT 08:14:34 ON 23 MAR 2006

E US-20050260515/PN

L1 1 S E3  
SEL RN

FILE 'REGISTRY' ENTERED AT 08:14:50 ON 23 MAR 2006

L2 11 S E1-E11  
L3 9 S L2 AND OXIDE

FILE 'CA' ENTERED AT 08:16:19 ON 23 MAR 2006

L4 36 S L3 AND TONER  
L5 3 S L4 AND AREA

=> s 14 not 15

L6 33 L4 NOT L5

=> d kwic 1-5

L6 ANSWER 1 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Magnetic toner containing vinyl polymer

AB Disclosed is a magnetic toner comprising a binder resin and a magnetic material, wherein (a)  $\geq 1$  binder resin is selected from a vinyl resin having. . . vinyl resin having COOH and epoxy, and a vinyl resin derived from the reaction between COOH and epoxy, (b) a toner has a wt. av. grain diam. 5.0-9.0  $\mu\text{m}$ , (c) the toner has a true sp. gr. 1.1-1.6 g/cm<sup>3</sup>, and (d) the toner has sp. magnetic properties.

ST magnetic toner vinyl polymer

IT Electrophotographic developers

# STN Columbus

- (magnetic toners; magnetic toner contg. vinyl polymer)
- IT 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer 25767-47-9P, Butyl acrylate-styrene copolymer 26428-43-3P, Butyl acrylate-glycidyl methacrylate-styrene copolymer 30351-76-9P, Acrylic acid-butyl acrylate-methacrylic acid copolymer 30580-66-6P, Acrylic acid-butyl acrylate-glycidyl methacrylate-styrene copolymer 56790-33-1P, Acrylic acid-butyl acrylate-divinylbenzene copolymer  
RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)
- (magnetic toner contg. vinyl polymer)
- IT 11129-48-9, Iron zinc oxide 12063-19-3, Zinc ferrite 12673-39-1 12789-64-9, Titanium ferrite 25085-99-8, Epomik R140P  
RL: NUU (Other use, unclassified); USES (Uses)
- (magnetic toner contg. vinyl polymer)
- L6 ANSWER 2 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Electrophotographic single-component developer development method for stable supply of toner
- AB The title development method utilizes toner particles contg. 40-200 nm diam. silica additives and 5-25 nm diam. Al oxide-SiO<sub>2</sub> mixed oxide additives, and a specified revolution. . . .
- ST electrophotog single component developer development toner additive silica alumina
- IT Electrophotographic development  
(electrophotog. single-component developer development method for stable supply of toner)
- IT Electrophotographic developers  
(single-component; electrophotog. single-component developer development method for stable supply of toner)
- IT 7631-86-9, Silica, uses 159995-97-8, Aluminum silicon oxide  
RL: MOA (Modifier or additive use); USES (Uses)  
(additive to toner; electrophotog. single-component developer development method for stable supply of toner)
- L6 ANSWER 3 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Electrophotographic magnetic toner, its manufacture, developer, and electrophotography using it
- AB The toner is manufd. by a process comprising steps of (1) adding a flocculating agent into resin particle dispersions and then heating. . . . the agglomerated particle, and (3) heating the particles B for fusing them. The developer contains a carrier and the obtained toner. Also claimed is the electrophotog. employing the same developer. The toner shows improved developability, chargeability, and good performance in transforming the images on image receptors.
- ST electrophotog toner prepn magnetic particle dispersion; developer electrophotog magnetic toner prepn
- IT Heating  
(fusing magnetic particles and polymer binder particles; in manuf. of electrophotog. magnetic toner contg. fused composite of magnetic particles and polymer binders)
- IT Electrophotographic developers  
(magnetic toners; manuf. of electrophotog. magnetic toner contg. fused composite of magnetic particles and polymer binders)
- IT Electrophotographic developers  
Electrophotography  
(manuf. of electrophotog. magnetic toner contg. fused composite of magnetic particles and polymer binders)
- IT 12673-39-1P, Iron silicon oxide  
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)  
(as Si-contg. magnetite, magnetic particle; manuf. of electrophotog.

- magnetic **toner** contg. fursed composite of magnetic particles and polymer binders)
- IT 438537-48-5P, Butyl acrylate- $\beta$ -carboxyethyl acrylate-1,10-decanediol diacrylate-styrene copolymer  
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)  
 (binder; manuf. of electrophotog. magnetic **toner** contg. fursed composite of magnetic particles and polymer binders)
- IT 1327-41-9, Polyaluminum chloride  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (floculant for polymer dispersion; in manuf. of electrophotog. magnetic **toner** contg. fursed composite of magnetic particles and polymer binders)
- IT 13463-67-7P, Titania, preparation  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (in Si-contg. magnetite particles; in manuf. of electrophotog. magnetic **toner** contg. fursed composite of magnetic particles and polymer binders)
- IT 18624-44-7P, Ferrous hydroxide  
 RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)  
 (in prepn. of Si-contg. magnetite particles; in manuf. of electrophotog. magnetic **toner** contg. fursed composite of magnetic particles and polymer binders)
- IT 1344-09-8, Sodium silicate 7720-78-7, Ferrous sulfate  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (in prepn. of Si-contg. magnetite particles; in manuf. of electrophotog. magnetic **toner** contg. fursed composite of magnetic particles and polymer binders)
- IT 1310-73-2, Sodium hydroxide, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (in prepn. of Si-contg. magnetite particles; in manuf. of electrophotog. magnetic **toner** contg. fursed composite of magnetic particles and polymer binders)
- IT 421548-39-2, Neogen RK  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (ionic surfactant, in dispersion of Si-contg. magnetite particles; in manuf. of electrophotog. magnetic **toner** contg. fursed composite of magnetic particles and polymer binders)
- L6 ANSWER 4 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Negatively charged electrophotographic **toner** containing certain external additive, its manufacture, and full-color image-forming apparatus using it
- AB The **toner** contains a colorant-contg. resin particle of which surface is covered with additives comprising (1) 2 kinds of silica particles (A). . . Ti, Sn, Zr, or Al, and (3) Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> composite oxide particle (C) obtained by hydrolysis in flame and hydrophobized. The **toner**, contg. less reversedly charged **toner** and showing improved transfer efficiency, is manufd. by adding A to the resin particle and adding B and C to it. The app. involves an intermediate transfer medium for transferring an image of the **toner** on a photoreceptor to a recording material.
- ST neg charging electrophotog **toner** external additive; **toner** additive silica particle surface modification; electrophotog **toner** retransfer prevention alumina silica
- IT Color electrophotographic toners  
 Electrophotographic apparatus  
 (manuf. of neg. charged **toner** contg. certain external additive for full-color electrophotog. app. with improved transfer efficiency)

## STN Columbus

- IT Polyesters, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (particle, **toner**; manuf. of neg. charged **toner**  
 contg. certain external additive for full-color electrophotog. app.  
 with improved transfer efficiency)
- IT Belts  
 (transfer; manuf. of neg. charged **toner** contg. certain  
 external additive for full-color electrophotog. app. with improved  
 transfer efficiency)
- IT 25038-59-9, PET polymer, uses  
 RL: DEV (Device component use); USES (Uses)  
 (Al-deposited, transfer belt; manuf. of neg. charged **toner**  
 contg. certain external additive for full-color electrophotog. app.  
 with improved transfer efficiency)
- IT 7631-86-9, Silica, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (optionally titania-modified, hydrophobized, **toner**; manuf. of  
 neg. charged **toner** contg. certain external additive for  
 full-color electrophotog. app. with improved transfer efficiency)
- IT 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (particle, **toner**; manuf. of neg. charged **toner**  
 contg. certain external additive for full-color electrophotog. app.  
 with improved transfer efficiency)
- IT 701910-46-5, Himer ES 803  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (particle, **toner**; manuf. of neg. charged **toner**  
 contg. certain external additive for full-color electrophotog. app.  
 with improved transfer efficiency)
- IT 13463-67-7, Titania, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (silica modified with, **toner**; manuf. of neg. charged  
**toner** contg. certain external additive for full-color  
 electrophotog. app. with improved transfer efficiency)
- IT 999-97-3, Hexamethyldisilazane 3069-19-0, n-Hexyltrimethoxysilane  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (silica treated with, **toner**; manuf. of neg. charged  
**toner** contg. certain external additive for full-color  
 electrophotog. app. with improved transfer efficiency)
- IT 159995-97-8P, Aluminum silicon oxide  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM  
 (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (**toner**; manuf. of neg. charged **toner** contg. certain  
 external additive for full-color electrophotog. app. with improved  
 transfer efficiency)
- L6 ANSWER 5 OF 33 CA COPYRIGHT 2006 ACS on STN
- AB The devices for heat fixation of **toner** images on receptors, have covers  
 lined on inner surface with layers of ceramics [e.g., mullite (or  
 alumina)-silica solid mixt.] to insulate heat and minimize consumption  
 energy. The devices for recovery of residual toners from image receptors  
 are equipped with **toner**-transporting pipes covered with heat-insulating  
 ceramic layers externally to prevent toners from sticking onto the pipe  
 walls.
- ST electrophotog **toner** fusion recovery heat efficiency; alumina silica  
 coated electrophotog **toner** fuser cover; thermal barrier ceramic coating  
**toner** fuser cover
- IT Ceramic coatings

# STN Columbus

(heat-insulating; toner fusers and recovery devices equipped with ceramic coatings for enhancement of heat efficiency)

IT Electrophotographic apparatus  
Thermal barrier coatings  
(toner fusers and recovery devices equipped with ceramic coatings for enhancement of heat efficiency)

IT 1344-28-1, Alumina, uses 7631-86-9, Silica, uses  
RL: DEV (Device component use); USES (Uses)  
(heat-insulating coating layers; toner fusers and recovery devices equipped with ceramic coatings for enhancement of heat efficiency)

IT 159995-97-8, Aluminum silicon oxide  
RL: DEV (Device component use); USES (Uses)  
(mullite-type, heat-insulating coating layers; toner fusers and recovery devices equipped with ceramic coatings for enhancement of heat efficiency)

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L6 ANSWER 1 OF 33 CA COPYRIGHT 2006 ACS on STN

## Full Text

AN 143:336237 CA  
TI Magnetic toner containing vinyl polymer  
IN Taya, Masaaki; Michiue, Tadashi; Shibayama, Yasuko; Sano, Tomohisa  
PA Canon Inc., Japan  
SO Jpn. Kokai Tokkyo Koho, 37 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005265958	A2	20050929	JP 2004-74637	20040316
PRAI	JP 2004-74637		20040316		

L6 ANSWER 3 OF 33 CA COPYRIGHT 2006 ACS on STN

## Full Text

AN 142:382149 CA  
TI Electrophotographic magnetic toner, its manufacture, developer, and electrophotography using it  
IN Kubo, Tsutomu; Tanaka, Hiroyuki; Serizawa, Manabu; Kiyonori, Shigeru; Taniguchi, Shuichi; Yanagida, Kazuhiko; Matsumura, Yasuo  
PA Fuji Xerox Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 22 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005099179	A2	20050414	JP 2003-330465	20030922
PRAI	JP 2003-330465		20030922		

=> d kwic 6-10

L6 ANSWER 6 OF 33 CA COPYRIGHT 2006 ACS on STN

AB . . . 80%, dried, and heat-treated 1 min at 180° to give a wiping cloth showing wiping property rating (5 no residual toner, 1 large amt. of residual toner) 4-5 on wiping silicone oil from a glass plate, spreading a toner on the plate, and blowing away the toner from

## STN Columbus

- the plate, and exhibiting H<sub>2</sub>O absorption rate  $\leq 1$  s and H<sub>2</sub>O retention amt. 305%, and showing NH<sub>3</sub> odor absorption. . .
- IT 52337-09-4, Silicon titanium oxide  
 RL: CAT (Catalyst use); USES (Uses)  
 (deodorant; wiping cloths with good hygroscopicity and deodorant antibacterial properties comprising polyamide fibers and polyester fibers and having complex oxides contg. silicon and titanium, and polymers on the surface)
- L6 ANSWER 7 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Electrophotographic toner external additive for improving toner fluidity and charging property, electrophotographic toner, developer, development and imaging apparatus
- AB The title electrophotog. toner external additive comprises Si-contg. oxide microparticles having a primary particle size of 30-300 nm, a permittivity of 1.4-3.5, a spherical. . .
- ST electrophotog toner external additive silicon contg oxide microparticle developer
- IT Polyesters, preparation  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (binder in toner contg. electrophotog. toner external additive for improving toner fluidity and charging property)
- IT Electrophotographic apparatus  
 Electrophotographic developers  
 Electrophotographic development  
 Electrophotographic toners  
 (electrophotog. toner external additive for improving toner fluidity and charging property, electrophotog. toner, developer, development and imaging app.)
- IT Polyethers, preparation  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (epoxy; binder in toner contg. electrophotog. toner external additive for improving toner fluidity and charging property)
- IT Polysiloxanes, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (for surface treatment of electrophotog. toner external additive for improving toner fluidity and charging property)
- IT Epoxy resins, preparation  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyether-; binder in toner contg. electrophotog. toner external additive for improving toner fluidity and charging property)
- IT 116736-81-3P, Ethoxylated bisphenol A-fumaric acid-propoxylated bisphenol A-trimellitic anhydride copolymer 342416-67-5P, Bisphenol A-epichlorohydrin-propoxylated bisphenol A diglycidyl ether-bisphenol F copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (binder in toner contg. electrophotog. toner external additive for improving toner fluidity and charging property)
- IT 999-97-3, Hexamethyldisilazane 9016-00-6, Poly[oxy(dimethylsilylene)] 31900-57-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (for surface treatment of electrophotog. toner external additive for improving toner fluidity and charging property)
- IT 1185-55-3, Methyltrimethoxysilane 7440-32-6, Titanium, reactions

## STN Columbus

- 7782-44-7, Oxygen, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of electrophotog. toner external additive for  
 improving toner fluidity and charging property)
- IT 7631-86-9P, Silica, preparation 52337-09-4P, Silicon titanium  
 oxide  
 RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP  
 (Preparation); USES (Uses)  
 (surface treated with hexamethyldisilazane; electrophotog.  
 toner external additive for improving toner fluidity  
 and charging property)
- L6 ANSWER 8 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Electrophotographic toner with aluminum silicon oxide external additive  
 and image formation
- AB The toner, for non-contact a.c. development and press-transferring the  
 toner image on a receptor, comprises toner mother particles coated  
 with external additive contg. Al Si mixed oxide particles formed by flame  
 hydrolysis. The toner, for giving image by transferring the toner  
 image onto an intermediate transfer material and re-transferring the image  
 on a receptor, comprises toner mother particles coated with external  
 additive contg. Al Si mixed oxide particles formed by flame hydrolysis,  
 and the friction coeff. satisfies  $\mu_p > \mu_b$  ( $\mu_p$  = friction coeff.  
 between the photoreceptor and toner image;  $\mu_b$  = friction coeff.  
 between the intermediate transfer material and toner image). The  
 toner is transferred at high ratio, toner rejection is decreased, and  
 clear images without central defect are obtained.
- ST electrophotog toner external additive alumina silica; friction coeff  
 photoreceptor toner image intermediate transfer material
- IT Electrophotographic toners  
 (electrophotog. toner having aluminum silicon oxide external  
 additive)
- IT Polyesters, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. toner having aluminum silicon oxide external  
 additive)
- IT 159995-97-8, Aluminum silicon oxide  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (electrophotog. toner having aluminum silicon oxide external  
 additive)
- IT 82213-09-0D, Bisphenol A propylene oxide adduct-terephthalic  
 acid-trimellitic acid copolymer, reaction products with polyvalent metal  
 compd. 89993-86-2, Bisphenol A propylene oxide adduct-terephthalic acid  
 copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. toner having aluminum silicon oxide external  
 additive)
- L6 ANSWER 9 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Electrophotographic toner coated with external additive and image  
 forming method
- AB The toner, for non-contact a.c. development, comprises toner mother  
 particles contg. a releasing agent and coated with external additive  
 contg. Al Si mixed oxide particles formed by flame hydrolysis at coating  
 degree 50-200%. Feathering and toner filming on development are  
 prevented.
- ST electrophotog toner releasing agent; alumina silica external additive  
 electrophotog toner
- IT Electrophotographic toners  
 (electrophotog. toner contg. releasing agent and coated with  
 aluminum silicon oxide)



## STN Columbus

IT Carnauba wax  
Polyesters, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(electrophotog. **toner** contg. releasing agent and coated with aluminum silicon oxide)

IT 159995-97-8, Aluminum silicon oxide  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(electrophotog. **toner** contg. releasing agent and coated with aluminum silicon oxide)

IT 82213-09-0D, Bisphenol A propylene oxide adduct-terephthalic acid-trimellitic acid copolymer, reaction products with polyvalent metal compd. 89993-86-2, Bisphenol A propylene oxide adduct-terephthalic acid copolymer  
RL: TEM (Technical or engineered material use); USES (Uses)  
(electrophotog. **toner** contg. releasing agent and coated with aluminum silicon oxide)

L6 ANSWER 10 OF 33 CA COPYRIGHT 2006 ACS on STN

ST neg charging electrophotog **toner** vinyl polymer; electrophotog process cartridge vinyl polymer **toner**; alkyl acrylamide acrylate polymer electrophotog **toner**; methacrylate alkyl methacrylamide polymer electrophotog **toner**

IT 1344-28-1, Alumina, uses 7631-86-9, Silica, uses 13463-67-7, Titania, uses 37220-25-0, Aluminum titanium oxide 52337-09-4, Silica titania 54427-26-8, Aluminum silicon titanium oxide 159995-97-8, Aluminum silicon oxide  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(flowability improvers; neg.-charging electrophotog. toners contg. vinyl copolymer charge control agents for forming fog-free high-d. images)

=> d kwic 11-20; fil stnguide

L6 ANSWER 11 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Negatively charging electrophotographic **toner**

AB The title **toner** consists of **toner** mother particles and an hydrophobic external additives, wherein the external additive consists of hydrophobic aluminum oxide/silicone dioxide composite oxide particles. . . and hydrophobic fine metal oxide particles having larger work function than the hydrophobic aluminum oxide/silicone dioxide composite oxide particles. The **toner** shows decreased amt. of fogging **toner** and reverse-transfer **toner** and provides improved image-transfer efficiency.

ST neg charging electrophotog **toner**

IT Electrophotographic toners  
(neg. charging electrophotog. **toner**)

IT 13463-67-7, Titanium oxide, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(anatase; neg. charging electrophotog. **toner**)

IT 1344-28-1, Alumina, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(external additive; neg. charging electrophotog. **toner**)

IT 1111-74-6, Dimethylsilane 7631-86-9, Silica, uses 159995-97-8, Silicon aluminum oxide  
RL: TEM (Technical or engineered material use); USES (Uses)  
(neg. charging electrophotog. **toner**)

IT 999-97-3, Hexamethyldisilazane  
RL: TEM (Technical or engineered material use); USES (Uses)  
(surface treating agent of external additive; neg. charging electrophotog. **toner**)

## STN Columbus

- L6 ANSWER 12 OF 33 CA COPYRIGHT 2006 ACS on STN
- ST hydrophobicized silica alumina composite **toner** fluidizing agent; aluminum silicon oxide **toner** fluidizing agent; electrophotog **toner** fluidizing agent charging stability
- IT 159995-97-8, Aluminum silicon oxide  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (hydrophobicized silica-alumina composite powders for fluidizing agents of electrophotog. toners)
- L6 ANSWER 13 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Electrophotographic magnetic **toner** showing improved developability and durability in high speed development system
- AB The title pos.-charging 3.0-9.0  $\mu\text{m}$  diam. magnetic **toner** comprises a binder resin 100 and a magnetic material 20-200 parts, wherein the magnetic material is 200-1000 nm diam. octahedron shape iron oxide particles comprised of Si-contg. cores coated with composite Fe oxide contg. Si and Zn, and the **toner** shows a  $\tan\delta$  value of  $1.0 \times 10^{-3}$ - $1.0 \times 10^{-2}$  at  $30^\circ$ ,  $5.0 \times 10^3$  Hz.
- ST electrophotog magnetic **toner** octahedron iron oxide magnetite silicon zinc
- IT Polyesters, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (binder in electrophotog. magnetic **toner** showing improved developability and durability in high speed development system)
- IT Electrophotographic developers  
 (magnetic toners; electrophotog. magnetic **toner** showing improved developability and durability in high speed development system)
- IT 25767-47-9, Butyl acrylate-styrene copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (binder in electrophotog. magnetic **toner** showing improved developability and durability in high speed development system)
- IT 12673-39-1P, Iron silicon oxide 220333-68-6P, Iron silicon zinc oxide  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (electrophotog. magnetic **toner** showing improved developability and durability in high speed development system)
- IT 1317-61-9P, Iron oxide ( $\text{Fe}_3\text{O}_4$ ), preparation  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (magnetite-type; electrophotog. magnetic **toner** showing improved developability and durability in high speed development system)
- IT 6834-92-0 7720-78-7 7733-02-0, Zinc sulfate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of magnetite particles for electrophotog. magnetic **toner**)
- L6 ANSWER 14 OF 33 CA COPYRIGHT 2006 ACS on STN
- AB . . . with the photoreceptor surface and is placed in the downstream of the roller, and (c) a means for removal of **toner** from the cleaning roller by application of const. current bias voltage having the opposite polarity with the charged **toner**. The photoconductor of the said app. contains an interlayer, in between the conductive support and the photosensitive layer, which contains. . .
- IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (Me hydrogen, titania surface treated with; electrophotog. photoconductors with interlayers contg. surface-treated n-type semiconductor particles for defect-free image formation in app.)

## STN Columbus

- equipped with **toner** cleaning rollers and blades)
- IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (di-Me, assumed monomers, titania surface treated with; electrophotog. photoconductors with interlayers contg. surface-treated n-type semiconductor particles for defect-free image formation in app. equipped with **toner** cleaning rollers and blades)
- IT Electrophotographic photoconductors (photoreceptors)  
 (interlayers; electrophotog. photoconductors with interlayers contg. surface-treated n-type semiconductor particles for defect-free image formation in app. equipped with **toner** cleaning rollers and blades)
- IT Semiconductor materials  
 (n-type; electrophotog. photoconductors with interlayers contg. surface-treated n-type semiconductor particles for defect-free image formation in app. equipped with **toner** cleaning rollers and blades)
- IT 55398-96-4, CM 8000  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (CM 8000, interlayer binder; electrophotog. photoconductors with interlayers contg. surface-treated n-type semiconductor particles for defect-free image formation in app. equipped with **toner** cleaning rollers and blades)
- IT 31900-57-9 49718-23-2  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (assumed monomers, titania surface treated with; electrophotog. photoconductors with interlayers contg. surface-treated n-type semiconductor particles for defect-free image formation in app. equipped with **toner** cleaning rollers and blades)
- IT 13463-67-7, Titania, uses 374712-25-1, TTO 55S 374756-72-6, SMT 500SAS 374759-13-4, UMT 500SAX 475584-80-6, STT 30AFS  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (surface-treated semiconductor particles; electrophotog. photoconductors with interlayers contg. surface-treated n-type semiconductor particles for defect-free image formation in app. equipped with **toner** cleaning rollers and blades)
- IT 1344-28-1, Alumina, uses 3069-19-0, Hexyltrimethoxysilane 3069-40-7, Octyltrimethoxysilane 9004-73-3, Poly[oxy(methylsilylene)] 9016-00-6, Dimethylpolysiloxane 17927-72-9, Diisopropoxytitanium bis(acetylacetonate) 74751-86-3, Butoxyzirconium tris(acetylacetonate) 159995-97-8, Aluminum silicon oxide  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (titania surface treated with; electrophotog. photoconductors with interlayers contg. surface-treated n-type semiconductor particles for defect-free image formation in app. equipped with **toner** cleaning rollers and blades)
- L6 ANSWER 15 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Electrophotographic dry **toner** showing stable performance for extended period of time
- AB The invention relates to an electrophotog. dry **toner** which contains TiO<sub>2</sub>-SiO<sub>2</sub> ceramic additives to improve its electrophotog. properties. The TiO<sub>2</sub>-SiO<sub>2</sub> additive may be prep'd. by a vapor method.
- ST electrophotog dry **toner** titania silica ceramic additive
- IT Electrophotographic toners  
 (electrophotog. dry **toner** showing stable performance for extended period of time)
- IT 7631-86-9, Silica, uses 13463-67-7, Titania, uses 159995-97-8, Aluminum silicon oxide 458540-86-8, F 4S20 458540-89-1, F 6S10  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (additive to electrophotog. dry **toner** for showing stable performance for extended period of time)

## STN Columbus

L6 ANSWER 16 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Electrophotographic dry toner showing reduced filming on photoconductor surface

AB The title electrophotog. dry toner particles include alumina-silica composite oxide on their surfaces. The alumina-silica composite oxide is prepd. by a vapor phase method. The. . .

ST electrophotog dry toner reduced filming alumina silica composite oxide

IT Electrophotographic toners  
(electrophotog. dry toner contg. alumina-silica composite oxide additive for reducing filming on photoconductor surface)

IT 159995-97-8, Aluminum silicon oxide 453508-85-5, UFA 100S3  
RL: TEM (Technical or engineered material use); USES (Uses)  
(electrophotog. dry toner contg. alumina-silica composite oxide additive for reducing filming on photoconductor surface)

L6 ANSWER 17 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Toner cleaning brush in electrophotographic imaging apparatus

AB The invention relates to a toner cleaning brush in a cleaning unit of an electrophotog. imaging app., wherein the cleaning brush contains polar adsorbents. The polar. . . zeolite with  $\geq 6$ -membered oxygen ring is suitable as the polar adsorbent. The electrophotog. imaging app. utilizes an amorphous-Si photoconductor. The toner cleaning brush effectively removes (ammonium nitrate) products formed on the photoconductor surface during discharging processes to achieve high quality images. . .

ST electrophotog toner cleaning brush imaging app polar adsorbent zeolite

IT Clays, uses  
RL: DEV (Device component use); USES (Uses)  
(activated; polar adsorbent in electrophotog. toner cleaning brush for removing ammonium nitrate from photoconductor surface)

IT Cleaning  
(app.; electrophotog. toner cleaning brush with polar adsorbent for removing ammonium nitrate from photoconductor surface)

IT Electrophotographic apparatus  
(electrophotog. toner cleaning brush with polar adsorbent for removing ammonium nitrate from photoconductor surface)

IT Adsorbents  
(in electrophotog. toner cleaning brush for removing ammonium nitrate from photoconductor surface)

IT Silica gel, uses  
Zeolites (synthetic), uses  
RL: DEV (Device component use); USES (Uses)  
(polar adsorbent in electrophotog. toner cleaning brush for removing ammonium nitrate from photoconductor surface)

IT 1344-28-1, Alumina, uses  
RL: DEV (Device component use); USES (Uses)  
(activated; polar adsorbent in electrophotog. toner cleaning brush for removing ammonium nitrate from photoconductor surface)

IT 7440-21-3, Silicon, uses  
RL: DEV (Device component use); USES (Uses)  
(amorphous; electrophotog. toner cleaning brush with polar adsorbent for removing ammonium nitrate from photoconductor surface made up of)

IT 6484-52-2, Ammonium nitrate, processes  
RL: FMU (Formation, unclassified); REM (Removal or disposal); FORM (Formation, nonpreparative); PROC (Process)  
(electrophotog. toner cleaning brush for removing)

IT 159995-97-8, Aluminum silicon oxide  
RL: DEV (Device component use); USES (Uses)  
(polar adsorbent in electrophotog. toner cleaning brush for removing ammonium nitrate from photoconductor surface)

# STN Columbus

L6 ANSWER 18 OF 33 CA COPYRIGHT 2006 ACS on STN  
 AB . . . particles may contain magnetite as main component, etc. The Fe oxide particles are esp. suitable for material powder of magnetic toner, material powder for carrier of electrostatic latent image development, black pigment power for paints, etc.  
 ST iron oxide particle silicon iron composite oxide coating prodn; magnetite particle silicon iron composite oxide coating prodn; magnetic toner coated iron oxide particle prodn; electrophotog carrier coated iron oxide particle prodn; paint black pigment coated iron oxide particle prodn  
 IT 12673-39-1, Iron silicon oxide  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coatings; coated iron oxide particles and prodn. of same)

L6 ANSWER 19 OF 33 CA COPYRIGHT 2006 ACS on STN  
 AB . . . preferably made of porous ceramics. The app. is suitable for applying a release oil on an electrophotog. roller for fixing toner so that staining of printed paper by toner left on the roller is prevented.  
 IT 9002-84-0, PTFE 159995-97-8, Aluminum silicon oxide  
 RL: DEV (Device component use); USES (Uses)  
 (porous; coating app. for applying oil comprising oil supporting part and coating regulating part bonded through adhesive contg. silicone oil)

L6 ANSWER 20 OF 33 CA COPYRIGHT 2006 ACS on STN  
 TI Electrophotographic toner image receptor paper showing excellent toner adhesion and blocking-resistance  
 AB The title electrophotog. paper includes inorg. pigment particles comprised of silica and 1x10-5-20 % alumina in a toner receiving layer. The toner receiving layer comprises the inorg. pigment 5-1000 parts and a binder resin 100 parts.  
 ST electrophotog toner image receptor paper silica alumina pigment binder  
 IT Polyesters, uses  
 RL: DEV (Device component use); USES (Uses)  
 (binder; electrophotog. toner image receptor paper contg. silica and alumina pigments in toner receiving layer to improve toner adhesion and blocking-resistance)

IT Electrophotographic paper  
 (receptor; electrophotog. toner image receptor paper contg. silica and alumina pigments in toner receiving layer to improve toner adhesion and blocking-resistance)

IT 9002-89-5, PVA 117 37337-82-9, Vylon 200 103657-45-0, Acrylic A807  
 RL: DEV (Device component use); USES (Uses)  
 (binder; electrophotog. toner image receptor paper contg. silica and alumina pigments in toner receiving layer to improve toner adhesion and blocking-resistance)

IT 1335-30-4, VP 3375 159995-97-8, Aluminum silicon oxide  
 RL: DEV (Device component use); USES (Uses)  
 (electrophotog. toner image receptor paper contg. silica and alumina pigments in toner receiving layer to improve toner adhesion and blocking-resistance)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	51.24	59.47
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-14.91	-14.91

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 LAST RELOADED: Mar 17, 2006 (20060317/UP).

=> fil ca; d kwic 21-33; fil stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.12	59.59

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-14.91

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FILE COVERS 1907 - 16 Mar 2006 VOL 144 ISS 13  
 FILE LAST UPDATED: 16 Mar 2006 (20060316/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

L6 ANSWER 21 OF 33 CA COPYRIGHT 2006 ACS on STN  
 ST iron oxide octahedral particle dispersibility electrostatog toner; silicon content iron oxide particle coercive force; zinc iron oxide coating magnetite magnetic satn; flowability magnetite particle silicon content electrostatog toner  
 IT 11129-48-9, Iron zinc oxide 12673-39-1, Iron silicon oxide 12678-40-9, Aluminum iron oxide 157822-50-9, Aluminum iron silicon oxide  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coatings; iron oxide octahedral particles with low coercive force and high magnetic satn.)

L6 ANSWER 22 OF 33 CA COPYRIGHT 2006 ACS on STN  
 AB . . . by desensitization, and extending pigments of inorg. particles contg. silica and alumina in one particle. The plate material shows good toner fixability, improved hydrophilicity, and printing durability.  
 IT 1314-13-2, Sazex 2000, uses 1335-30-4, VP 3375 67256-35-3, Aerosil MOX 170 159995-97-8, Aluminum silicon oxide  
 RL: DEV (Device component use); USES (Uses)

## STN Columbus

(lithog. plate with image receiving layer contg. extending pigment)

L6 ANSWER 23 OF 33 CA COPYRIGHT 2006 ACS on STN

AB The title developer contains **toner** particles, which contains a binder resin and a colorant, and a fluidizing agent, wherein the fluidizing agent is fine powder. . . .

IT 159995-97-8P, Aluminum silicon oxide

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(hydrophobizing agent for fluidizing agent in dry two-component developer contg. for electrostatog. image)

L6 ANSWER 24 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Iron oxide particle for electrophotographic **toner** and its manufacture

ST iron oxide particle manuf magnetite composite oxide electrophotog **toner**

IT Electrophotographic developers

(magnetic toners; iron oxide particle for electrophotog. **toner** and its manuf.)

IT 12673-39-1P, Iron silicon oxide

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(composite oxide coating on magnetite particle for electrophotog. magnetic **toner**)

IT 7429-90-5, Aluminum, uses 7439-98-7, Molybdenum, uses 7440-33-7,

Tungsten, uses 7440-45-1, Cerium, uses 7723-14-0, Phosphorus, uses

RL: MOA (Modifier or additive use); USES (Uses)

(in composite oxide coating on magnetite particle for electrophotog. magnetic **toner**)

IT 1310-73-2, Sodium hydroxide, reactions 7720-78-7, Ferrous sulfate 12627-13-3, Silicate

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of magnetite particle for electrophotog. magnetic **toner**)

L6 ANSWER 25 OF 33 CA COPYRIGHT 2006 ACS on STN

TI **Toner**, image forming method and apparatus unit

AB A **toner** is disclosed which contains **toner** particles and a hydrophobic fine silica powder. The hydrophobic fine silica powder has the following hydrophobic properties: the transmittance of. . . vol. is 90% or more. Also, disclosed are an image forming method and an app. unit making use of the **toner**.

ST electrophotog **toner** hydrophobic silica powder

IT Polysiloxanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(di-Me derivs.; electrophotog. **toner** contg. hydrophobic fine silica powder)

IT Electrophotographic apparatus

Electrophotographic toners

Electrophotography

(electrophotog. **toner** contg. hydrophobic fine silica powder)

IT 999-97-3, Hexamethyldisilazane 7631-86-9, Silica, uses 12049-50-2,

Calcium titanate 12060-59-2, Strontium titanate 52337-09-4,

Silicon titanium oxide

RL: TEM (Technical or engineered material use); USES (Uses)

(electrophotog. **toner** contg. hydrophobic fine silica powder)

L6 ANSWER 26 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Electrophotographic **toner** with excellent properties

AB The invention relates to the electrophotog. **toner** which contains (surface-modified) Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> mixed oxides prepd. by thermal decompn. The surface modification is carried out by hexamethyl disilazane, silicone. . .

## STN Columbus

- ST electrophotog **toner** aluminum silicon oxide thermal decompn  
 IT Electrophotographic toners  
 Thermal decomposition  
 (electrophotog. **toner** with aluminum silicon mixed oxide  
 prepd. by thermal decompn.)
- IT Polysiloxanes, processes  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (for surface treatment of aluminum silicon mixed oxide in  
 electrophotog. **toner**)
- IT 7446-70-0, Aluminum chloride, reactions 10026-04-7, Silicon chloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (electrophotog. **toner** with aluminum silicon mixed oxide  
 prepd. by thermal decompn.)
- IT 159995-97-8P, Aluminum silicon oxide  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (electrophotog. **toner** with aluminum silicon mixed oxide  
 prepd. by thermal decompn.)
- IT 556-67-2, Octamethylcyclotetrasiloxane 999-97-3, Hexamethyl disilazane  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (for surface treatment of aluminum silicon mixed oxide in  
 electrophotog. **toner**)
- L6 ANSWER 27 OF 33 CA COPYRIGHT 2006 ACS on STN
- ST electrophotog **toner** titanium complex charge controller; magnetic iron  
 mixed oxide electrophotog **toner**; polyol titanium coordination compd  
 charge controller; wax electrophotog **toner** additive
- IT 12673-39-1, Iron silicon oxide 12789-35-4, Iron magnesium oxide  
 39361-81-4, Iron zirconium oxide 60240-58-6, Iron phosphorus oxide  
 157822-50-9, Aluminum iron silicon oxide 220333-68-6, Iron silicon zinc  
 oxide 220333-69-7, Iron phosphorus silicon oxide  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (colorant; titanium complex charge controllers in electrophotog. toners  
 for clear image formation under high- and low moisture conditions)
- L6 ANSWER 28 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Electrophotographic magnetic **toner** containing phenol-aldehyde condensate  
 charge-controlling agent
- AB The **toner** contains (A) a condensate of PhOH or its deriv. and an  
 aldehyde and (B) magnetic Fe oxide contg.  $\geq 0.05$  wt.%. . . .  
 contains  $\geq 2$  kinds of condensates having different unit nos. and  
 comprises chain condensates or their mixts. with cyclic condensates. The  
**toner** shows stable charging property at low humidity and high humidity.
- ST magnetic **toner** phenol aldehyde charge controller; electrophotog magnetic  
**toner** phenol charge controller; iron oxide electrophotog magnetic **toner**
- IT Electrophotographic developers  
 (magnetic toners; electrophotog. magnetic **toner** contg. . .  
 phenol-aldehyde condensate charge-controlling agent)
- IT Phenolic resins, preparation  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (oligomeric; electrophotog. magnetic **toner** contg.  
 phenol-aldehyde condensate charge-controlling agent)
- IT 1314-23-4P, Zirconia, preparation 7631-86-9P, Silica, preparation  
 RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP  
 (Preparation); USES (Uses)  
 (coating for iron oxide; electrophotog. magnetic **toner** contg.  
 phenol-aldehyde condensate charge-controlling agent)
- IT 11129-48-9P, Iron zinc oxide 12673-39-1P, Iron silicon oxide  
 12789-35-4P, Iron magnesium oxide 60240-58-6P, Iron phosphorus oxide  
 157822-50-9P, Aluminum iron silicon oxide  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material



# STN Columbus

use); PREP (Preparation); USES (Uses)  
 (electrophotog. magnetic toner contg. phenol-aldehyde condensate charge-controlling agent)

IT 221873-47-8P 224054-10-8P 224054-11-9P 224187-47-7P 224187-48-8P  
 224187-49-9P 224187-51-3P 224187-52-4P 224187-53-5P 224187-55-7P  
 224187-57-9P 224187-60-4P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (oligomeric; electrophotog. magnetic toner contg. phenol-aldehyde condensate charge-controlling agent)

L6 ANSWER 29 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Electrophotographic toner containing dimeric phenol-aldehyde condensate

AB The title toner comprises a resin binder, a magnetic Fe oxide contg. 20.05 wt.% (based on Fe) diverse elements, and a dimeric condensate. . . aryl, aralkyl, alicyclic group, alkenyl, silyl, acyl (these groups may be substituted with OH, halo, CO2H, alkyl, or acyl)]. The toner shows stable charging properties and provides high-quality images under low- and high-moisture conditions.

ST electrophotog toner magnetic phenol aldehyde condensate; iron oxide magnetic electrophotog toner

IT Electrophotographic developers  
 (magnetic toners; electrophotog. toner contg. magnetic Fe mixed oxide and dimeric phenol-aldehyde condensate)

IT 3772-19-8 6538-35-8 220333-62-0 220333-63-1 220333-64-2  
 220333-65-3 220333-66-4 220333-67-5

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. toner contg. magnetic Fe mixed oxide and dimeric phenol-aldehyde condensate)

IT 12673-39-1, Iron silicon oxide 12789-35-4, Iron magnesium oxide 39361-81-4, Iron zirconium oxide 60240-58-6, Iron phosphorus oxide 157822-50-9, Aluminum iron silicon oxide 220333-68-6, Iron silicon zinc oxide 220333-69-7, Iron phosphorus silicon oxide

RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrophotog. toner contg. magnetic Fe mixed oxide and dimeric phenol-aldehyde condensate)

L6 ANSWER 30 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Magnetic iron oxide (magnetite) particle for magnetic toner, and magnetic toner

AB . . . of the claimed magnetite. Magnetic toners contg. the claimed magnetite are also claimed. The magnetite is resistant to falling from toner particles, and the claimed toners show high fluidity.

ST silicon magnetite particle magnetic toner; electrog toner magnetite surface treated; electrophotog toner magnetite surface treated; iron silicon oxide particle magnetic; hydrophobicized magnetite particle toner

IT Hydrophobicity  
 (agents, coatings; magnetic Fe oxide (magnetite) particle contg. Si for magnetic toner)

IT Coupling agents  
 (coatings; magnetic Fe oxide (magnetite) particle contg. Si for magnetic toner)

IT Electrographic toners  
 Electrophotographic toners  
 Magnetic particles  
 (magnetic Fe oxide (magnetite) particle contg. Si for magnetic toner)

IT 2530-87-2, A 143

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)  
 (coupling agent, coatings; magnetic Fe oxide (magnetite) particle

## STN Columbus

- contg. Si for magnetic toner)
- IT 4669-02-7, Isopalmitic acid 61417-49-0, Plenact TTS  
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)  
 (hydrophobicizing agent, coatings; magnetic Fe oxide (magnetite) particle contg. Si for magnetic toner)
- IT 12673-39-1P, Iron silicon oxide  
 RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (magnetic; magnetic Fe oxide (magnetite) particle contg. Si for magnetic toner)
- L6 ANSWER 31 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Decalcomania of ceramic article using transfer sheet having reverse toner image formed by electrophotography
- AB The title decalcomania sheet comprises a transfer sheet coated with a toner having a reverse image and mainly contg. a thermoplastic resin, an elec. charge-controlling agent, and an inorg. pigment; the toner layer if formed by electrophotog. The toner may contain a glass component. Decalcomania of a ceramic article is carried out by laminating and firing the sheet.
- IT Frits  
 (in toner; decalcomania of ceramic article using sheet having reverse image formed by electrophotog.)
- IT Polyesters, processes  
 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (in toner; decalcomania of ceramic article using sheet having reverse image formed by electrophotog.)
- IT 174633-44-4, Silicon zirconium oxide  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (pigment in toner; decalcomania of ceramic article using sheet having reverse image formed by electrophotog.)
- L6 ANSWER 32 OF 33 CA COPYRIGHT 2006 ACS on STN
- TI Toner for developing electrostatic image
- AB The title toner comprises toner particles contg. a binder resin and a colorant and, as an external additive, inorg. fine particles including metal oxide particles. . . .  $\mu\text{m}$  or silicone oil-contg. Si oxide particles or Si complex oxide particles with av. particle size 0.03-50  $\mu\text{m}$ , and the toner may have the above-mentioned endothermic peak and shape factors, SF-1 and SF-2, measure by image anal., satisfying the following conditions:. . . . include inorg. carbide, metal carbonate particles, silicone oil-contg. SiO<sub>2</sub> or Si composite oxide with regulated av. particle size and the toner may have the above-mentioned endothermic peak. Since the toner shows back-transfer from image-supporting substrate to photoconductor under high elec. current, high d. images are obtained.
- ST electrophotog toner back transfer resistance; inorg fine metal oxide additive toner; endothermic peak regulated electrophotog toner
- IT Polysiloxanes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (amino-contg.; electrophotog. toner contg. inorg. fine particle as external additive treated with)
- IT Electrophotographic toners  
 (electrophotog. toner contg. inorg. fine particle as external additive showing back-transfer resistance)
- IT Polysiloxanes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (electrophotog. toner contg. inorg. fine particle as external additive treated with)
- IT Hydrocarbon waxes, uses

# STN Columbus

RL: MOA (Modifier or additive use); USES (Uses)  
(electrophotog. toner having regulated endothermic peaks  
contg.)

IT Alcohols, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(long-chain; electrophotog. toner having regulated  
endothermic peaks contg.)

IT Polyolefins  
RL: MOA (Modifier or additive use); USES (Uses)  
(wax; electrophotog. toner having regulated endothermic peaks  
contg.)

IT 9016-00-6, Dimethylsiloxane 31900-57-9, Dimethylsilanediol homopolymer  
RL: MOA (Modifier or additive use); USES (Uses)  
(electrophotog. toner contg. inorg. fine particle as external  
additive treated with)

IT 409-21-2, Silicon carbide, uses 471-34-1, Calcium carbonate, uses  
513-77-9, Barium carbonate 1314-13-2, Zinc oxide, uses 1314-23-4,  
Zirconium oxide, uses 1317-61-9, Iron oxide (Fe3O4), uses 1344-28-1,  
Alumina, uses 1633-05-2, Strontium carbonate 7631-86-9, Silica, uses  
12014-74-3, Cerium oxide (CeO) 12049-50-2, Calcium titanium oxide  
(CaTiO3) 12060-59-2, Strontium titanium oxide (SrTiO3) 12069-32-8,  
Boron carbide 12070-08-5, Titanium carbide 13451-00-8, Strontium  
metasilicate 13463-67-7, Titania, uses 159995-97-8, Aluminum  
silicon oxide  
RL: MOA (Modifier or additive use); USES (Uses)  
(powd.; electrophotog. toner contg. inorg. fine particle as  
external additive showing back-transfer resistance)

IT 9002-88-4, Polyethylene  
RL: MOA (Modifier or additive use); USES (Uses)  
(wax; electrophotog. toner having regulated endothermic peaks  
contg.)

L6 ANSWER 33 OF 33 CA COPYRIGHT 2006 ACS on STN

TI Magnetite particles for magnetic toner and their manufacture

ST magnetite manuf magnetic toner; iron zinc oxide coating magnetite

IT Oxidation  
(magnetite particles coated with iron zinc oxide for magnetic  
toner and their manuf.)

IT Recording materials  
(magnetic, magnetite particles coated with iron zinc oxide for magnetic  
toner and their manuf.)

IT 11129-48-9P, Iron zinc oxide 12673-39-1P, Iron silicon oxide  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM  
(Technical or engineered material use); PREP (Preparation); USES (Uses)  
(coating; magnetite particles coated with iron zinc oxide for magnetic  
toner and their manuf.)

IT 1317-61-9P, Iron oxide (fe3o4), uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(magnetite particles coated with iron zinc oxide for magnetic  
toner and their manuf.)

IT 1344-09-8, Sodium silicate 7720-78-7 7733-02-0, Zinc sulfate  
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC  
(Process); RACT (Reactant or reagent)  
(magnetite particles coated with iron zinc oxide for magnetic  
toner and their manuf.)

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

18.19

77.78

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	ENTRY	SESSION
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=> fil ca; d bib 24 27 29-31 33; fil stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.36	78.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
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FILE COVERS 1907 - 16 Mar 2006 VOL 144 ISS 13  
 FILE LAST UPDATED: 16 Mar 2006 (20060316/ED)

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L6 ANSWER 24 OF 33 CA COPYRIGHT 2006 ACS on STN

## Full Text

AN 134:23487 CA  
 TI Iron oxide particle for electrophotographic toner and its manufacture  
 IN Watanabe, Hiroyuki; Katsuyama, Koichi  
 PA Mitsui Mining and Smelting Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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## STN Columbus

PI	JP 2000335921	A2	20001205	JP 1999-150694	19990528
	JP 3595196	B2	20041202		
	JP 2005015337	A2	20050120	JP 2004-225268	20040802
PRAI	JP 1999-150694	A3	19990528		

L6 ANSWER 27 OF 33 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 132:214753 CA  
 TI Electrophotographic toners for formation of stable images under high and low moisture conditions  
 IN Tanigawa, Hirohide; Kobori, Naokuni  
 PA Canon Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 37 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2000075556	A2	20000314	JP 1998-243683	19980828
PRAI	JP 1998-243683		19980828		

L6 ANSWER 29 OF 33 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 130:175279 CA  
 TI Electrophotographic toner containing dimeric phenol-aldehyde condensate  
 IN Tanigawa, Hirohide; Umino, Makoto  
 PA Canon K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 11030880	A2	19990202	JP 1997-184846	19970710
	JP 3634572	B2	20050330		
PRAI	JP 1997-184846		19970710		
OS	MARPAT 130:175279				

L6 ANSWER 30 OF 33 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 129:128971 CA  
 TI Magnetic iron oxide (magnetite) particle for magnetic toner, and magnetic toner  
 IN Yoshizawa, Minoru; Aoki, Noritaka; Misawa, Hiromitsu; Miyazaki, Shigenori; Uchida, Naoki  
 PA Toda Kogyo Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 18 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 10182163	A2	19980707	JP 1996-356840	19961225
	JP 3578191	B2	20041020		
PRAI	JP 1996-356840		19961225		

L6 ANSWER 31 OF 33 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 129:18873 CA

# STN Columbus

TI Decalcomania of ceramic article using transfer sheet having reverse  
toner image formed by electrophotography  
IN Kawase, Hiromitsu; Oshima, Koichi; Enokimoto, Takamichi; Kuramoto,  
Shinichi  
PA Ricoh Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10114197	A2	19980506	JP 1996-287444	19961009
PRAI	JP 1996-287444		19961009		

L6 ANSWER 33 OF 33 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 125:210904 CA  
TI Magnetite particles for magnetic toner and their manufacture  
IN Hashiuchi, Masachika; Yoshimaru, Katsuhiko; Watanabe, Hiroyuki  
PA Mitsui Mining Smelting Co, Japan  
SO Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08208236	A2	19960813	JP 1995-34683	19950201
	JP 3419941	B2	20030623		
PRAI	JP 1995-34683		19950201		

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	6.98	85.12
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-21.30

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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Mar 17, 2006 (20060317/UP).

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